IN THE CLAIMS

Claims 1-20 are pending in this application with claims 1-6, 12, 13 and 18 being amended by this response.

1. (Currently Amended) A method for processing application program data for storage and retrieval employed by a processing device, comprising the steps of:

~~accessing a first physical storage dataset comprising a first end storage address, said first physical storage dataset having a predetermined storage capacity; and~~

designating a logical dataset ~~comprising~~ encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets having a predetermined storage capacity, ~~said plurality of physical storage datasets, comprising said first physical storage dataset, each of said plurality of physical storage datasets, comprising an end storage address, each of said plurality of physical storage datasets, having predetermined storage capacities~~

storing an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address subsequent to said end storage address.

2. (Currently Amended) The method of claim 1, further comprising:

maintaining a plurality of identifiers in a repository identifying each end storage address of each physical storage dataset ~~comprised in~~ of said plurality of physical storage datasets.

3. (Currently Amended) The method of claim 1, further comprising:

sequentially storing data in said ~~logical dataset~~ first and second physical storage datasets.

4. (Currently Amended) The method of claim 1, further comprising:

monitoring ~~data storage in said logical dataset to determine an occurrence of data storage at a location identified by one of said end storage addresses of said plurality of physical storage datasets~~ the amount of storage used by the logical dataset to enable allocation of physical memory device resources to the logical dataset.

5. (Currently Amended) The method of claim 1, ~~further comprising:~~

~~monitoring data storage in said logical dataset to determine an occurrence of data storage at a location identified by one of said end storage addresses of said plurality of physical storage datasets; and~~ wherein said step of continuing said sequential storage of data comprises

extending the storage of data beyond a physical storage boundary of said first physical storage dataset in a subsequent physical storage dataset of said logical dataset starting at an address subsequent to said end storage address ~~said one of said end storage addresses of said plurality of physical storage datasets~~.

6. (Currently Amended) A method for processing application program data for storage and retrieval employed by a processing device, comprising the steps of:

designating a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets ~~individually~~ having a predetermined storage capacity;

maintaining an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address subsequent to said end storage address.

7. (Original) The method according to claim 6, wherein

said step of monitoring said sequential storage of data in said logical dataset includes the step of maintaining an identifier of storage capacity used in response to storage of data in said logical dataset.

8. (Original) The method according to claim 7, wherein

said determination of said occurrence of data storage at said location identified by said end storage address of said first physical storage dataset is performed using said identifier of storage capacity used and said predetermined storage capacity of said first physical storage dataset.

9. (Original) The method according to claim 6, wherein

said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.

10. (Original) The method according to claim 6, wherein

at least one physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

11. (Original) The method according to claim 6, wherein

said identifier identifying an end storage address comprises a pointer supporting identifying address locations of particular records in said logical dataset.

12. (Currently Amended) A system for processing data for storage and retrieval, comprising:

a ~~designation~~ processor adapted to:

designate a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets ~~individually~~ having predetermined storage capacities; and

a dataset processor adapted to:

maintain an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially store data in said logical dataset;

monitor said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

continue said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address subsequent to said end storage address.

13. (Currently Amended) The system of claim 12, wherein

said ~~dataset~~ processor is adaptable to maintain an identifier of storage capacity used in response to storage of data in said logical dataset.

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14. (Original) The system of claim 12, wherein

said dataset processor is adaptable to determine said occurrence of data storage at said location identified by said end storage address of said first physical storage dataset by using an identifier of storage capacity used and said predetermined storage capacity of said first physical storage dataset.

15. (Original) The system of claim 12, wherein

said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.

16. (Original) The system of claim 12, wherein

said at least one physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

17. (Original) The system of claim 12, wherein

said identifier identifying an end storage address comprises a pointer supporting identifying address locations of particular records in said logical dataset.

18. (Currently Amended) A machine-readable media comprising instructions for a plurality of activities comprising:

designating a logical dataset encompassing a plurality of physical storage datasets, each of said plurality of physical storage datasets individually having predetermined storage capacities;

maintaining an identifier identifying an end storage address of a first physical storage dataset of said logical dataset indicating end of said predetermined storage capacity of said first physical storage dataset;

sequentially storing data in said logical dataset;

monitoring said sequential storage of data in said logical dataset to determine an occurrence of data storage at a location identified by said end storage address of said first physical storage dataset; and

continuing said sequential storage of data in a second physical storage dataset of said logical dataset starting at an address subsequent to said end storage address.

19. (Original) The machine readable medium of claim 18, wherein a physical storage dataset comprises an IBM virtual storage access method entry sequenced dataset (VSAM ESDS).

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20. (Original) The machine readable medium of claim 18, wherein said end storage address of said first physical storage dataset of said logical dataset comprises a relative address.